

LARGE DATABASE SEARCH USING CAM AND HASH

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10	search engine	228a-d	paths
12	controller		
14	hash function	300	search engine
16	memory	310	H-CAM
16a	base region	312	controller
16b	conflicts region	314	memory
18	address bus	314a	base region
20	result bus	314b-e	conflicts regions
		316	search data bus
50	search engine	318	address bus
52	controller	320	result bus
54	CAM	322a-d	hash units
56	memory	324a-d	CAM units
58	search data bus	326	logic unit
60	address bus	328a-j	paths
62	result bus		
		400	search engine
100	search engine	410	H-CAM
110	hash pointer unit	412	controller
112	controller	414	memory
114	memory	414a	base region
116	hash function	414b-c	conflicts regions
118	address bus	416	search data bus
120	pointer bus	418	address bus
122	result bus	420	result bus
		422a-b	hash units
200	search engine	424a-b	CAM units
210	H-CAM	426	logic unit
212	controller	428a-e	paths
214	memory	430	programming unit
214a	base region		
214b	conflicts region	500	process
216	search data bus	510-550	steps
218	address bus		
220	result bus	600	search engine
222	hash unit	610	H-CAM
224	CAM unit	612	controller
226	logic unit	614	memory

620 result bus
 622 hash unit
 624 CAM unit
 640 logic unit
 652 comparison section
 654 search data storage
 656 comparator
 658 logic unit
 660 hash pointer memory
 662 search data memory
 664 hit line

 700 search engine
 710 H-RAM
 712 controller
 714 memory
 722 hash unit
 740 logic unit
 752 comparison section
 754 search data storage
 756 comparator
 758 logic unit
 766 comparison section

 800 search engine
 810 H-CAM
 812 controller
 814 memory
 862 hash blocks
 864 CAM block
 866 comparison section
 868 main logic unit
 870 input logic sub-units
 872 hash unit
 874 input logic sub-unit
 876 CAM units

878 output logic sub-unit
 880 search data storage
 882 comparator
 884 output logic sub-unit
 886 input path
 888 hit line

 900 search engine
 910 H-CAMs
 912 controller
 914 memory
 916 search data bus
 918 address bus
 920 result bus
 922 expansion bus
 924 hit line

 1000 search engine
 1010 H-RAMs
 1012 controller
 1014 memory
 1016 search data bus
 1018 address bus
 1020 result bus
 1022 expansion bus

 1100 search engine
 1110a CAMs
 1110b H-CAMs
 1110c H-RAMs
 1112 controller
 1114 memory
 1116 search data bus
 1118 address bus
 1120 result bus
 1122 expansion bus

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